

Towers of Hanoi

#include <stdio.h>

void towers(int, char, char, char);

int main()

{

int num;

printf("Enter the number of disks: ");

scanf("%d", &num);

printf("The sequence of moves
involved in the Tower of Hanoi are: \n");

towers(num, 'A', 'C', 'B');

return 0;

auxpeg)

void towers(int num, char frompeg, char topeg, char

{

if (num == 1)

{

printf("\n Move disk 1 from peg %c
to peg %c", frompeg, topeg);

return;

}

towers(num-1, frompeg, auxpeg, topeg);

printf("\n Move disk %d from peg %c to
peg %c", num, frompeg, topeg);

towers(num-1, auxpeg, topeg, frompeg);

{

GCD.

```
#include <stdio.h>
```

```
int gcd(int, int);
```

```
int main()  
{
```

```
    int n1, n2, num;  
    printf("Enter two positive integers: ");  
    scanf("%d %d", &n1, &n2);  
    printf("GCD of %d and %d", n1, n2,  
           gcd(n1, n2));
```

```
    return 0;  
    system("pause");
```

```
int gcd(int n1, int n2)  
{
```

```
    if (n2 != 0)  
        return gcd(n2, n1 % n2);
```

```
    else  
        return n1;  
}
```

#modification

```
int lcm(int n1, int n2)  
{  
    temp = n1 * n2;  
    temp = temp / gcd(n1, n2);  
    printf("%d", temp); return temp;  
}
```